THE RECOVERY KERNEL

Substance-Specific Navigation Series

HOW TO RECOVER FROM METHAMPHETAMINE

AND AMPHETAMINE-CLASS STIMULANTS

Using the Recovery Kernel Framework

Methamphetamine · Crystal Meth · Adderall · Vyvanse · Ritalin · MDMA · Cocaine · Prescription Stimulants

⚠ HARM REDUCTION RESOURCE — NOT MEDICAL ADVICE | Crisis: call 911 or text 988

A Note Before You Begin

This guide is a navigation instrument. It tells you which Recovery Kernel protocols to use, in what order, and why — specifically for methamphetamine, prescription stimulants like Adderall and Vyvanse, and other amphetamine-class substances including MDMA and cocaine. These substances share a common mechanism: they flood the dopamine system with an intensity no natural experience can match — and in doing so, they dismantle the brain's ability to generate its own reward.

What happened to you was not weakness. Your brain has specific genetic architecture — COMT variants, DRD2 receptor density, MTHFR methylation status — that made stimulants feel necessary in a way most people around you will never understand. The substance was solving a real neurobiological problem. It was just destroying everything else while it did so.

This guide addresses that biology directly. The path out is not willpower. It is reconstruction — rebuilding the dopamine system from the cellular level up, replacing what the drug provided with biological alternatives that will not cost you everything you care about.

Work through this guide in sequence. Do not skip ahead. Each section prepares the ground for the next.

⚠ MEDICAL EMERGENCY SITUATIONS — STOP AND CALL 911 NOW IF:

- Chest pain, irregular heartbeat, or difficulty breathing
- Seizure, loss of consciousness, or severe confusion
- Body temperature above 104°F (40°C) — hyperthermia is life-threatening in stimulant overdose
- Psychosis: seeing or hearing things that are not there, paranoid beliefs you cannot reason your way out of
- Active suicidal thoughts with a plan

Meth withdrawal is rarely medically dangerous in the way alcohol or benzo withdrawal is. But meth-induced psychosis and cardiovascular events during use ARE medical emergencies. Know the difference.

Section 1 — What the Drug Did to Your Brain

You cannot navigate recovery without understanding the terrain. This section explains the biology in plain language. Read it even if you think you already know it. Knowing it intellectually and understanding it in your body are different things.

THE CENTURION — The Machine That Was Hijacked

Your brain contains a reward circuit — the mesolimbic dopamine pathway — that evolved to do one thing: motivate survival behaviors by making them feel good. Eating when hungry. Connection with other humans. Accomplishment. Sex. These experiences release dopamine into the nucleus accumbens — the brain's reward center — and the signal says: that was important. Do it again.

Methamphetamine does not work through this circuit the way natural rewards do. It does not simply trigger dopamine release. It forces every dopamine-producing neuron in the brain to dump its entire supply simultaneously — while blocking the reuptake transporters that would normally clear the signal. The result is a dopamine flood 1,000 to 10,000 times greater than any natural reward can produce.

The brain is not designed for this. It has no experience of this magnitude. Its only response is to protect itself by doing three things, all of which create the trap you are now trying to escape:

What the brain does	The mechanism	What you experience
Downregulates D2 receptors	Removes dopamine receptors from the synapse to reduce the overwhelming signal	Normal life becomes gray. Nothing feels good. Nothing is enough. The baseline is now anhedonia.
Reduces dopamine production	Decreases synthesis of dopamine to compensate for forced flooding	Your brain now produces less dopamine than before you started. The deficit is biological, not motivational.
Damages dopamine axons	Methamphetamine is directly neurotoxic at high doses — it destroys the terminals of dopamine-producing neurons in the striatum and prefrontal cortex	Cognitive impairment, emotional blunting, and motivation deficits that may take years to fully repair

THE CENTURION — The Stimulant Class — Same Engine, Different Intensities

All stimulants in this guide work through the same fundamental mechanism — dopamine system flooding — but at different intensities and with different

secondary effects. Where you are on this spectrum determines the severity of your withdrawal and the depth of reconstruction required.

Substance	Dopamine flood intensity	Neurotoxicity	Withdrawal severity	Key difference from meth
Methamphetamine (crystal, ice, speed)	Extreme — highest of all stimulants	High — direct neurotoxin at doses	Severe — weeks to months	Longest recovery timeline; most structural brain damage; psychosis risk highest
Cocaine / crack	Very high	Moderate — vascular primarily	Severe but shorter peak	Shorter half-life — binge cycles common; cardiovascular risk primary; similar dopamine mechanism
MDMA (ecstasy, molly)	High — serotonin + dopamine	Moderate — serotonergic neurotoxicity at high doses	Moderate — 'comedown' weeks	Serotonin system also heavily impacted — 5-MTHF and serotonin precursor support is essential alongside dopamine work
Adderall (amphetamine salts)	Moderate–high	Low at therapeutic doses; higher with abuse	Moderate — often underestimated	Prescribed context creates denial — 'it was just my medication'. The dopamine disruption is real regardless of the prescription pad.
Vyvanse (lisdexamfetamine)	Moderate — slower onset	Low at therapeutic doses	Moderate — similar to Adderall	Prodrug design reduces abuse potential but extended use still produces receptor downregulation requiring the same reconstruction protocol
Ritalin / methylphenidate	Moderate	Low at therapeutic doses	Mild–moderate	DAT reuptake inhibitor — different mechanism but same end state with chronic use: depleted baseline dopamine function

If your drug of choice is not methamphetamine but is on this list, the framework applies to you. Use methamphetamine as the intensity reference point — your timeline will generally be shorter, but the biological reconstruction protocol is identical.

Section 2 — Your Genomic Blueprint

The Recovery Kernel is built on a foundational principle: your genetics shaped your vulnerability and they shape your recovery. Two people can use the same drug for the same duration and one recovers in six months while the other fights for years. The difference is largely biological. Understanding your specific genetic architecture is not optional for optimal recovery — it is the foundation.

The DNA Panel for Stimulant Recovery

THE CENTURION — The Genes That Built the Trap

These are the specific genetic variants most relevant to stimulant addiction and dopamine system recovery. You do not need all of them to proceed — but knowing your profile allows you to individualize every supplement and behavioral protocol in this guide.

Testing options: Genomind, GeneSight, Genomic Life, or raw DNA from 23andMe/AncestryDNA interpreted through Genetic Lifehacks, StrateGene, or SelfDecode.

Gene	What it controls	Variant to test for	Recovery relevance
COMT	Dopamine clearance speed	Val158Met (rs4680) — Val/Val (Warrior), Val/Met, or Met/Met (Sage)	CRITICAL. Val/Val (fast COMT) = Warrior constitution — drawn to stimulants for the aliveness they provide. Met/Met (slow COMT) = Sage constitution — drawn to stimulants as performance enhancement or escape from overthinking. Determines craving type and natural addiction porting strategy.
DRD2	Dopamine D2 receptor density	Taq1A (rs1800497) — A1 allele presence	A1 allele = 30-40% fewer D2 receptors at baseline. This IS Reward Deficiency Syndrome. If you carry A1, you were born needing more dopamine stimulation than average. The drug was correcting a deficit. Recovery must build multiple dopamine sources to compensate for what receptors cannot provide.
DRD4	Novelty seeking,	7-repeat allele (rs1800955)	7-repeat = novelty-seeking phenotype, impulsivity, ADHD

	dopamine sensitivity		overlap. High overlap with stimulant preference. Recovery must include novelty, challenge, and stimulation — stillness will not be enough.
DAT1 / SLC6A3	Dopamine transporter — reuptake speed	10-repeat VNTR allele (rs28363170)	10-repeat = higher DAT expression = faster dopamine clearance = lower baseline dopamine availability. This is why methylphenidate class drugs feel so normalizing to some people — they block this transporter. Supplement L-tyrosine and support dopamine synthesis directly.
MTHFR	Methylation — the foundation of all neurotransmitter synthesis	C677T (rs1801133) and A1298C (rs1801131)	If you carry C677T homozygous or compound heterozygous, your brain is producing neurotransmitters at reduced efficiency. Folate supplementation (folic acid) does nothing — you cannot convert it. 5-methyltetrahydrofolate (5-MTHF) is the active form your brain can actually use. This is non-negotiable foundation for all recovery.
MAOA	Monoamine oxidase A — breaks down dopamine, serotonin, norepinephrine	MAOA-uVNTR low vs high activity alleles	Low MAOA activity = monoamines accumulate. High MAOA activity = monoamines depleted rapidly. The second phenotype is associated with impulsivity and addiction severity. Relevant for supplement stack design and timing.
BDNF	Brain-derived neurotrophic factor — neural repair and plasticity	Val66Met (rs6265)	Met carriers have reduced BDNF secretion. Exercise-driven BDNF increase is your primary neuroplasticity tool — it works regardless of genotype, but Met carriers may need higher exercise intensity to generate the same repair signal. Do not skip the exercise protocol.
CYP2D6 / CYP2B6	Cytochrome P450 — metabolizes medications and some substances	Poor, intermediate, extensive, or ultra-rapid metabolizer	Critical if you are using any medications in your recovery (bupropion is CYP2B6-metabolized). Poor metabolizers may experience toxicity at standard doses. Ultra-rapid

			metabolizers may get no effect. Inform your prescriber.

Reading Your Profile Before You Have Test Results

You may not have genetic test results yet. That is fine. The Recovery Kernel's phenotyping tools — the COMT constitutional assessment and the Reward Deficiency Syndrome scoring in the main Compendium (Section 15) — give you working hypotheses based on your lived experience. Use those now and refine with genetic data when available.

Ask yourself:

- Did stimulants make me feel normal, focused, and alive in a way nothing else did? → Likely Warrior COMT + DRD2 deficit
- Did I use stimulants to perform — to work harder, longer, achieve more? → Likely Val/Val COMT, possibly DRD4 7-repeat
- Did I start with prescription stimulants and escalate? → Likely DRD2 deficit with tolerance development
- Do I also struggle with depression, emotional blunting, fatigue even when clean? → Likely MTHFR involvement — prioritize methylation support immediately

Section 3 — The Detox Protocol

Methamphetamine withdrawal will not kill you the way alcohol or benzodiazepine withdrawal can. But it will be one of the most profoundly unpleasant biological experiences of your life, and that is not an exaggeration — it is a fact worth knowing so you do not interpret the severity of what you feel as evidence that something has gone wrong.

Something has not gone wrong. Your brain is recalibrating. The misery is the signal that repair is beginning.

The Withdrawal Timeline

THE CENTURION — What Your System Is Moving Through

Timeline	Biology	Symptoms	What to do
Hours 0–24 (The Crash)	Dopamine reserves exhausted; receptor signaling collapsing	Extreme exhaustion, hypersomnia, depression, intense hunger, anxiety	Sleep. Eat. Hydrate. Do not resist the crash — it is the body beginning to recover. Execute Protocol 01 from the main Compendium (crisis shelter). Start electrolytes.
Days 1–5 (The Pit)	Dopamine levels at floor; D2 receptors still downregulated; brain screaming for the chemical it was dependent on	Severe depression, anhedonia, profound fatigue, drug cravings, disrupted sleep, muscle aches, cognitive fog	This is the highest relapse risk period. Do not be alone if avoidable. Start the supplement stack (Section 4). Walk outside daily even if brief. Begin sleep protocol. Text 988 if crisis.
Days 5–14 (The Gray)	Acute symptoms resolving; but dopamine system still significantly impaired; receptor upregulation barely beginning	Persistent flatness, low motivation, continued insomnia, cognitive impairment, intermittent cravings triggered by people/places/things	Begin exercise protocol — BDNF is your repair signal. Identify and begin avoiding environmental triggers (Protocol 05, main Compendium). Start tyrosine protocol if eating regularly.
Weeks 2–4 (The Slow Return)	D2 receptor density beginning to recover; dopamine synthesis slowly increasing; prefrontal cortex repair initiated	Gradual mood improvement with significant variability; cognitive fog lifting; cravings more episodic than constant; sleep	Establish consistent daily structure (Protocol 06). Begin natural addiction porting strategy (Section 6). Continue supplement stack. First meaningful behavioral targets.

		stabilizing	
Months 1–3	Measurable D2 receptor recovery on imaging; gray matter rebuilding in prefrontal cortex; dopamine synthesis normalizing	Genuine improvement with periodic cravings; emotional variability; PAWS (post-acute withdrawal) episodes possible	Maintain all protocols. Begin identity reconstruction work (Protocol 20, main Compendium). This is when the work gets interesting — you can feel the return of capacity.
Months 3–12	Significant receptor recovery; BDNF-driven neuroplasticity actively rebuilding damaged axons; prefrontal cortex function substantially restored	Near-baseline mood for most; episodic cravings primarily contextual; cognitive function largely restored; genuine enjoyment possible	The recast (C-28) becomes fully operational. Build the architecture of your natural addiction. Protect this period from high-stress events where possible.
Year 1–2+	Structural recovery largely complete for most; new neural pathways stable; dopamine system normalized with appropriate support	Meth feels like a chapter in your history rather than a current story. The craving, when it appears, is manageable rather than overwhelming.	This is not the finish line — it is the opening of the next chapter. Refer to Centurian Paper C-28 (natural addiction porting) in the main Compendium.

Post-Acute Withdrawal Syndrome (PAWS)

⚠ PAWS IS NOT RELAPSE. IT IS A MEDICAL PHENOMENON.

Between months 1 and 18, many people in stimulant recovery experience episodes — lasting hours to days — of sudden depression, intense cravings, cognitive fog, and emotional instability that appear without warning and can feel indistinguishable from early withdrawal. This is Post-Acute Withdrawal Syndrome: the brain's dopamine and prefrontal systems intermittently dipping below functional threshold as they repair.

PAWS episodes are most commonly triggered by: high stress, poor sleep, poor nutrition, illness, significant emotional events, and exposure to environmental cues associated with use. They are not evidence of failure. They are evidence of a brain still in repair.

When a PAWS episode hits: return immediately to Protocol 01 (shelter and stabilization), execute the craving interrupt protocol in Section 4.4 of this guide, contact your support structure, and add an additional dose of your baseline supplement stack.

Section 4 — Dopamine Reconstruction

This is the biological engine of your recovery. Everything in this section works at the neurochemical level to rebuild what the drug dismantled: receptor density, dopamine synthesis capacity, precursor availability, and the methylation foundation that makes all neurotransmitter production possible.

None of this replaces working the protocols. All of this makes working the protocols dramatically more effective.

Everything in this section: discuss with a physician or functional medicine practitioner before starting. These are supplements and nutritional compounds — not pharmaceuticals. But they are not inert. They have real neurological effects, which is precisely why they work.

4.1 — The Methylation Foundation

THE CENTURION — Build the Floor Before the House

Your brain cannot synthesize dopamine, serotonin, or norepinephrine without adequate methylation. MTHFR variants — present in a substantial portion of people with stimulant addiction — directly impair this process. Standard folic acid supplementation does not fix this. The enzyme needed to convert folic acid to the active form is precisely what MTHFR variants impair.

The active form is 5-methyltetrahydrofolate (5-MTHF). This is what your brain can use directly, regardless of your MTHFR status.

Supplement	Target dose range	Timing	Why it matters in stimulant recovery
5-MTHF (L-methylfolate) — the foundation	400–1000 mcg daily (start 400, increase slowly)	Morning with food	Directly supplies activated folate for dopamine, serotonin, and norepinephrine synthesis. Non-negotiable if MTHFR variants present. Start low — rapid methylation start can cause transient anxiety in some people.
Methylcobalamin (B12)	1000–2000 mcg daily	Morning	The other half of the methylation cycle. Works synergistically with 5-MTHF. Use methylcobalamin NOT cyanocobalamin — the methyl form is directly usable. Sublingual for best absorption.

P5P (Pyridoxal-5-Phosphate — active B6)	25–50 mg daily	Morning	Required cofactor for DOPA decarboxylase — the enzyme that converts L-DOPA to dopamine. Without adequate B6, tyrosine and L-DOPA cannot become dopamine. Do not use standard B6 (pyridoxine) — convert to P5P form only.
Magnesium glycinate	300–400 mg elemental	Evening	Cofactor for over 300 enzymatic reactions including COMT activity. Meth severely depletes magnesium. Glycinate form preferred — crosses blood-brain barrier; reduces anxiety and supports sleep without the laxative effect of other forms.
Zinc	15–30 mg daily	Evening with food	Cofactor for dopamine synthesis and COMT enzyme function. Meth depletes zinc significantly. Take with copper if supplementing long-term (8:1 zinc to copper ratio).

4.2 — Dopamine Precursor Stack

THE CENTURION — Feeding the Empty Furnace

The dopamine synthesis pathway runs: Phenylalanine → Tyrosine → L-DOPA → Dopamine. Meth depleted your entire supply of precursors while simultaneously damaging the neurons that use them. This stack feeds the pathway directly.

⚠ Do not start the precursor stack until you are eating at least two solid meals a day and acute withdrawal symptoms are stabilizing (typically Day 5–7 minimum). Precursors on an empty system with unstable neurochemistry can worsen anxiety.

Supplement	Target dose range	Timing	Notes
L-Tyrosine	500–2000 mg daily	Morning, away from protein	Direct dopamine precursor. Start at 500mg and titrate. Take on empty stomach or at least 30 min before protein — amino acids compete for transport. May cause anxiety if started too early in withdrawal. Warrior COMT types — use with care, you

			clear dopamine fast but may still experience overstimulation.
Mucuna pruriens (standardized to L-DOPA)	100–300 mg L-DOPA equivalent	Morning, away from protein	Natural source of L-DOPA — one step closer to dopamine than tyrosine. Useful if tyrosine alone is insufficient. Contains additional alkaloids that may support mood independently. Do not combine high-dose Mucuna with L-Tyrosine — choose one as primary.
NALT (N-Acetyl L-Tyrosine)	300–600 mg daily	Morning	More water-soluble form of tyrosine; better blood-brain barrier penetration. Some find this more effective than standard tyrosine, especially for cognitive fog. Alternative to L-Tyrosine — do not stack both.
Phenylalanine (DLPA)	500–1000 mg daily	Morning, away from protein	Upstream precursor that converts to tyrosine. Also produces PEA (phenylethylamine) which has mild mood-elevating effects. Useful adjunct for anhedonia in early recovery. Avoid if you have PKU or are on MAOIs.

4.3 — Receptor Rehabilitation: Plugging the Neuroreceptors

THE CENTURION — The Receptor Rebuild — Upregulation Through Withdrawal Support

The single most important structural event in stimulant recovery is D2 receptor upregulation — the gradual return of dopamine receptor density toward pre-addiction baseline. This happens automatically with abstinence. The question is how to support and accelerate it.

The principle here is what the Recovery Kernel calls receptor plugging: using natural compounds and behavioral protocols to occupy and stabilize dopamine receptors during the period when the synthetic flood is gone, preventing the 'empty receptor' signal from driving relapse behavior. You are giving the system enough signal to function while the receptors rebuild.

Compound	Mechanism	Dose / timing	Recovery role

Uridine monophosphate (UMP)	Stimulates D1/D2 receptor synthesis and density; increases synaptic dopamine sensitivity	250–500 mg daily, morning	One of the most evidence-supported receptor upregulation supplements. Works synergistically with omega-3 DHA. The Brain Stack: Uridine + DHA + choline is the most supported combination for neuroplasticity and receptor rebuilding in stimulant recovery.
Omega-3 (DHA-dominant)	Supports neuronal membrane fluidity — receptor function depends on membrane health	2–4g daily (DHA 1g+ minimum)	Works synergistically with uridine. Supports BDNF expression. Anti-inflammatory — reduces neuroinflammation from meth neurotoxicity. Take with uridine and choline for maximum effect.
CDP-Choline (Citicoline)	Choline precursor and uridine source; supports dopamine receptor density and acetylcholine production	250–500 mg daily, morning	Provides the choline component of the Brain Stack. Also independently supports prefrontal cortex function — critical for the executive function that meth impairs. Do not use high-dose choline if you are prone to depression — excess choline can worsen low mood in some.
Inositol	Regulates serotonin and dopamine receptor sensitivity; reduces anxiety	2–18g daily (titrate up — high doses needed for psychiatric effect)	Particularly valuable for the anxiety and obsessive thinking common in early stimulant withdrawal. Supports receptor sensitivity rather than flooding — compatible with the upregulation goal. Useful for MDMA recovery (serotonin receptor impact).
NAC (N-Acetyl Cysteine)	Restores glutamate homeostasis in the nucleus accumbens — the circuit most disrupted by addiction	600–1800 mg daily in divided doses	NAC directly addresses the glutamate-dopamine imbalance that drives craving. Multiple clinical trials support NAC for craving reduction across stimulant, cocaine, and meth addiction specifically. One of the highest-evidence supplements in this entire stack. Start at 600mg twice daily.

Lion's Mane mushroom extract	Stimulates NGF (Nerve Growth Factor) — promotes neurite outgrowth and axonal repair	500–1000 mg standardized extract, daily	Methamphetamine damages dopamine axon terminals in the striatum. Lion's Mane stimulates the repair of nerve endings via NGF. Emerging evidence for addiction recovery — addresses the structural neurotoxicity that other supplements do not reach.
Rhodiola rosea	Dopamine reuptake inhibition (mild); adaptogen; anti-fatigue; mood support	300–600 mg standardized extract (3% rosavins / 1% salidroside), morning	Provides mild dopaminergic support without flooding — compatible with the upregulation strategy. Reduces fatigue without stimulant effect. Particularly useful weeks 2–8 when anhedonia and exhaustion are pronounced but the precursor stack alone is insufficient.

4.4 — The Craving Interrupt Protocol

THE CENTURION — When the Signal Fires

A craving is a neurological event. It is not a moral failure, a character deficiency, or evidence that recovery is not working. It is a cluster of neurons that were trained to fire together when certain conditions occur, firing in the pattern they learned. You are not the craving. You are the person experiencing it.

The following sequence is for use in the moment a craving hits. Memorize it before you need it.

THE 5-MINUTE CRAVING INTERRUPT — EXECUTE IN ORDER

1. LOCATE IT IN THE BODY. Where do you feel the craving physically? Chest, stomach, jaw, hands? Name the location specifically. Put your hand there. This is a body event, not a thought — treat it as physical data, not a command.
2. EXECUTE THE 4-7-8 BREATH (Protocol 01, Section 1.2 of main Compendium). Four cycles, minimum. The extended exhale activates the vagus nerve. The parasympathetic response does not eliminate the craving — it creates the gap between stimulus and response that gives you options.
3. CHANGE THE PHYSICAL ENVIRONMENT. Move to a different room. Go outside. Get in your car and drive to a different location (not where you used). The cue-response circuit requires the original cue environment. Change the environment, reduce the circuit's power.

4. MAKE CONTACT. Text or call one person from your support structure. The content of the message matters less than the interruption of isolation. Cravings thrive in silence. They dissolve in contact.
5. EXECUTE YOUR MICRO-REWARD. You have a list (from your natural addiction architecture, Section 6). Find the highest-intensity item on it you can do in the next ten minutes. Execute it. You are practicing the redirect.
6. DOCUMENT IT. After the craving passes: write down the trigger, the intensity (0-10), what you did, and what happened. Patterns emerge. The documented craving becomes data. Data becomes leverage.

Cravings peak at 15–20 minutes and then subside. You do not have to win forever. You have to get through the next twenty minutes. Then the next twenty. This is the only time unit that matters in acute craving.

4.5 — Peptide Support Layer

The following peptides have mechanistic relevance to dopamine system reconstruction and neuroinflammation reduction. These are research compounds. They are not FDA-approved for addiction treatment. Discuss with a physician familiar with peptide therapy before use.

Peptide	Mechanism relevant to stimulant recovery	Proposed use timing	Notes
BPC-157	Dopamine system modulation; neuroprotection; reduces dopamine depletion from neurotoxins in animal models; gut-brain axis support	Weeks 1 onwards — daily	The most studied peptide with direct dopamine relevance. BPC-157 has been shown to counteract dopamine depletion in animal neurotoxicity models. Supports gut health — meth significantly disrupts the gut microbiome which affects dopamine production peripherally. Oral or subcutaneous.
Semax	BDNF and NGF upregulation; dopamine and serotonin modulation; cognitive enhancement	Weeks 2 onwards — as needed or daily	Russian nootropic peptide with strong BDNF-stimulating effects. Particularly valuable for cognitive fog and motivational deficit in months 1–3. Intranasal administration. Supports prefrontal cortex recovery.

Selank	Anxiolytic; GABA modulation; stabilizes dopamine/serotonin balance; reduces anxiety without sedation	Weeks 1–8 — as needed for anxiety	Particularly valuable for the anxiety component of stimulant withdrawal and PAWS. Works through a different mechanism than benzodiazepines — not addictive, does not produce dependence. Intranasal. Useful if anxiety is preventing sleep or driving craving.
Epitalon	Telomerase activation; pineal peptide pathway; melatonin synthesis support; chromatin stabilization	Months 1–3 — cycled (10 days on, 6 weeks off)	Sleep disruption is one of the most persistent consequences of meth use — meth suppresses melatonin synthesis and disrupts the pineal pathway for months. Epitalon works directly through this pathway. Also supports cellular repair broadly.
Dihexa	HGF/c-Met pathway; synaptogenesis; cognitive repair; supports new synaptic connections	Months 2–6 — as available	Emerging peptide for cognitive repair — promotes formation of new synaptic connections. Relevant for the prefrontal cortex damage from chronic meth use. Very active compound — start low. Limited human data but strong mechanistic rationale.

Section 5 — Rebuilding Sleep

THE CENTURION — Sleep Is Not Recovery's Side Benefit. Sleep IS the Recovery.

Every repair process documented in this guide — D2 receptor upregulation, BDNF-driven neuroplasticity, prefrontal cortex rebuilding, dopamine synthesis restoration — happens predominantly during sleep. Methamphetamine does not merely disrupt sleep. It attacks the biological machinery that generates sleep, sometimes for months. This is not laziness or poor sleep hygiene. It is neurological damage.

Rebuilding sleep is not a lifestyle suggestion in this protocol. It is a medical priority.

What Meth Did to Sleep Architecture

- Suppressed melatonin synthesis — meth blocks the pineal gland's melatonin production during use and for months after
- Destroyed REM sleep — stimulants eliminate the restorative sleep stage where emotional memory processing and dopamine system maintenance occur
- Upregulated arousal systems — the norepinephrine and hypocretin/orexin arousal systems are chronically activated; the brain cannot downshift
- Damaged circadian machinery — the feedback loops that regulate sleep-wake cycles are disrupted at the molecular level

The Sleep Stack

Supplement	Dose	Timing	Notes
Melatonin (low dose)	0.5–1mg	30–60 min before target sleep time	Counter-intuitive: low doses are more effective than high doses for sleep onset. 3–10mg tablets are pharmacological doses that disrupt natural melatonin rhythm rather than supporting it. Start at 0.5mg sublingual.
Magnesium glycinate	300–400mg elemental	1 hour before bed	Supports GABA — the primary inhibitory neurotransmitter; calms the arousal systems. Glycinate form is preferred for sleep; does not cause morning grogginess.
Glycine	3–5g	30 min before	Amino acid that reduces core

		bed	body temperature — the primary physiological trigger for sleep onset. Also glycine-receptor agonist in spinal cord — reduces arousal. Strong sleep quality data.
L-Theanine	200–400mg	Evening	Promotes alpha brainwave state — relaxed alertness that transitions to sleep. Non-sedating but reduces the anxiety-driven hyperarousal that prevents sleep onset in withdrawal.
Tart cherry extract or juice	480mg extract or 240ml juice	Evening	Natural melatonin source AND contains tryptophan and anthocyanins that reduce inflammatory signals disrupting sleep. Whole-food option that works synergistically with low-dose melatonin.
Phosphatidylserine	100–200mg	Evening	Reduces evening cortisol — elevated cortisol is a primary sleep disruptor in early recovery. Supports the HPA axis normalization that meth disrupted.

Also execute Protocol 09 (Sleep Architecture) from the main Compendium for the full behavioral and environmental sleep protocol. The supplements above work best within the structured sleep environment Protocol 09 creates.

Section 6 — Porting the Addiction: Same Engine, Different Address

THE CENTURION — Centurian Paper C-28 Applied to Stimulant Recovery

This is the section the rest of the guide builds toward.

You are not removing the drive. You cannot remove the drive. The compulsive intensity, the capacity for obsessive focus, the willingness to sacrifice everything for the thing that matters — that is the engine that methamphetamine ran on. It is not a character defect. It is the most powerful asset in your biology. The drug was a catastrophically bad address for it.

The Recovery Kernel calls this the recast: the Olympian of Nothing becomes an Olympian of something real. The same engine. Different address.

This is not metaphor and it is not motivation-poster language. It is neuroscience. The dopamine system does not care what it is chasing. It generates the same pursuit chemistry — the same craving, the same narrowing of focus, the same willingness to override everything else — for any target it has been trained to pursue. You are going to use that fact.

6.1 — The Stimulant Constitution's Natural Address

THE CENTURION — What the Warrior Brain Actually Needs

If you are a Warrior COMT (Val/Val) with DRD2 deficit — which describes the most common stimulant addiction profile — your baseline brain is a high-clearance, low-baseline-dopamine system that needs regular intense stimulation to feel alive. A calm, quiet life will never feel like enough. This is not something to overcome. It is something to design for.

The natural addiction targets for this constitution are characterized by:

- Intensity — not gentle, moderate, or safe. The dopamine hit from the natural target must be real.
- Mastery curve — there must always be a next level. The brain that chased meth needs a horizon that keeps moving.
- Social stakes or competition — dopamine release is amplified by social reward circuits. What is won in front of others hits harder.
- Physical engagement — the body's dopamine system responds more powerfully to physically demanding activities than to sedentary ones. The gym is not optional for this constitution.
- Novelty within structure — new challenges within a familiar domain. Pure novelty exhausts; mastery without novelty bores.

6.2 — The Natural Dopamine Architecture

Below are the highest-yield natural dopamine sources organized by intensity and accessibility. Your task is to build a portfolio — not one replacement, but a system of multiple sources at different time scales.

Category	Dopamine intensity	Examples	Why it works for stimulant recovery specifically
High-intensity exercise	Very High — 200-300% acute BDNF + dopamine + endorphin release	Running, HIIT, powerlifting, CrossFit, martial arts, competitive sport	The most powerful non-pharmacological dopamine intervention available. 30+ minutes at moderate-high intensity produces dopamine AND repairs the damage. This is simultaneously craving management AND brain repair. Non-negotiable for stimulant recovery.
Competition	High — social stakes amplify reward circuit	Competitive gaming, athletics, sales, chess, combat sports, debate	For the Warrior constitution, winning in front of others produces a dopamine release pattern that approximates the stimulant effect more than solitary achievement. Find a competition. Enter it. The pursuit of victory is the same engine the drug was running.
Creative mastery	High — especially with performance /audience	Music, art, writing, cooking, craftsmanship, engineering projects	The mastery curve is essential. Choose something with no ceiling — you can always get better. The dopamine hits on the mastery curve: first attempt, improvement milestones, completion, recognition. Stack them intentionally.
Achievement with public stakes	High — social validation amplifies	Business building, athletic goals made public, creative work with audience, physical transformation documented	Accountability to others is a dopamine multiplier. The Warrior brain that ran every stop sign to impress no one will move mountains when there are people watching. Use this deliberately rather than pretending you do not need it.
Purpose-driven service	Moderate-High — sustained over time	Coaching others in recovery, mentorship, leadership, advocacy	The brain in meaningful service to others generates sustained dopamine through both oxytocin (connection) and purpose circuits. Many people in stimulant recovery find their most stable natural high in becoming guides for others on the same path.
Cold exposure	Moderate — 250% dopamine	Cold shower, cold plunge, ice bath	One of the most research-supported acute dopamine interventions available without any substance.

	increase shown in research		Cold water immersion (1–3 min below 60°F) produces a dopamine increase that sustains for 2–4 hours post-exposure. Pair with exercise for compounding effect.
Sexual connection	High — dopamine + oxytocin + norepinephrine	Intimate relationship, physical connection, sexuality in recovery	Stimulant use profoundly disrupts the sexual reward system. Recovery of sexual capacity is itself a motivating milestone. Healthy sexual connection is a legitimate and powerful natural dopamine source. Note: addiction transfer to sexual behavior is a risk for high RDS profiles — monitor.

6.3 — Building Your Personal Architecture

SANCTUARY — The Recast Protocol — Your Action Assignment

This is not a meditation. It is a design exercise. Complete it in writing.

ASSIGNMENT 1 — THE FUNCTION AUDIT

What did meth actually do for you? Not what it cost — what did it provide? List every real function it served. Energy. Focus. Confidence. Social ease. Sexual performance. Escape from a reality that felt unbearable. Permission to feel something. The ability to work for sixteen hours straight.

Every item on that list is a need that did not disappear when the drug did. Recovery does not eliminate the need. It requires you to meet it differently.

ASSIGNMENT 2 — THE REPLACEMENT MAP

For each function you identified, identify a natural source that addresses the same need. Be ruthless about this — if the function was 'feeling powerful and invincible' then 'taking a gentle walk' is not the replacement. Powerlifting, or competitive fighting, or building something large, might be.

ASSIGNMENT 3 — THE ARCHITECTURE

Design a week that includes, at minimum:

- One high-intensity physical challenge (daily if possible)
- One activity with a mastery curve you are actively climbing
- One social-competitive or socially-stakes connection
- One creative or building project with a visible outcome
- One act of service or contribution that is larger than yourself

This is not a hobby schedule. This is a dopamine architecture. You are engineering a life that your biology can inhabit without chemical assistance.

Section 7 — Navigating the Recovery Kernel: Your Protocol Map

The Recovery Kernel Compendium contains 44+ protocols designed to address every dimension of recovery. This guide has given you the stimulant-specific biological foundation. Now here is your navigated sequence through the full system.

The Stimulant Recovery Protocol Sequence

THE CENTURION — Read This as a Journey Map, Not a Checklist

You do not need to complete these in rigid order. You need to know where you are, where you are going, and which protocol serves your current position. Use this map to navigate.

Phase	Protocols	Primary focus	Stimulant-specific notes
Crisis Entry (Hours 0–72)	Protocol 01, Protocol 06	Survival stabilization, environmental shelter, physiological first aid	Meth crash is extreme — hypersomnia, depression, hunger. Do not fight the crash. Execute Protocol 01 exactly as written. The crash is the body beginning to recover.
Biological Foundation (Days 1–14)	Protocol 07, Protocol 09, Protocol 10	Nutrition, hydration, sleep architecture, physical stabilization	Start methylation stack immediately. Start precursor stack Day 5–7. Begin sleep protocol. Exercise as soon as physically possible — even 10-minute walks count. BDNF is your repair engine.
Genomic Mapping (Weeks 1–4)	Section 15 (Compendium), Protocol 11, Protocol 12	COMT constitution assessment, RDS scoring, CYP phenotyping	Complete the phenotyping tools in Section 15 of the Compendium this week. Order DNA testing if financially accessible. Your genomic profile individualizes every subsequent decision.
Behavioral Architecture (Weeks 2–8)	Protocol 02, Protocol 05, Protocol 06	Addiction transfer management, digital detox, daily structure	Protocol 02 addiction transfer warning is HIGH PRIORITY for stimulant users — Warrior COMT brains will immediately seek stimulation elsewhere. Gambling, sexual compulsion, and risk-taking are the most common transfer targets. Name them now.
Environmental	Protocol 05, Protocol 08,	Trigger mapping, environment	Stimulant cue-reactivity is one of the strongest in addiction medicine

Architecture (Weeks 2–12)	Protocol 13	redesign, social architecture	— the brain's response to environmental cues associated with meth use can be overwhelming. Protocol 05 (environmental redesign) and Protocol 13 (trigger mapping) are high priority.
Identity Work (Months 1–6)	Protocol 20, Protocol 21, Protocol 23, C-28	Identity reconstruction, narrative rewriting, natural addiction porting	The stimulant user's identity is often heavily built around the speed, productivity, and capability the drug provided. Who you are without the chemical performance enhancement is the central identity question. Protocol 20 addresses this directly.
Relational Repair (Months 2–12)	Protocol 04, Protocol 08, Protocol 16, Protocol 22	Social reconnection, trust rebuilding, community architecture	Meth use typically devastates relationships. Protocol 16 (family and relationship repair) and Protocol 22 (community rebuilding) are essential. Isolation is the environment in which relapse incubates.
Long Game (Months 6–24+)	Protocol 24, Protocol 25, Protocol 35, C-28, C-31	Purpose architecture, meaning construction, the natural addiction fully operational	By month 6, the biological reconstruction is substantially complete. What you are building now is the life your biology can inhabit. The Olympian of Nothing is becoming an Olympian of something real. Centurian Paper C-28 is your map for this phase.

Section 8 — The Medical Support Layer

The Recovery Kernel is a biological framework. Some of the most powerful tools in stimulant recovery require a physician. This section tells you what to ask for.

Medications Your Doctor May Offer

THE CENTURION — The Pharmacological Bridge — What Exists and How It Fits

There is currently no FDA-approved medication specifically for methamphetamine use disorder. This is a genuine gap in addiction medicine. However, several medications have evidence for specific aspects of stimulant recovery and may be appropriate depending on your genomic profile and clinical picture.

Medication	Evidence for stimulant recovery	Genomic considerations
Bupropion (Wellbutrin)	Modest evidence for meth craving reduction; dopamine and norepinephrine reuptake inhibition	CYP2B6 metabolized — poor metabolizers experience much higher blood levels at standard doses. Val/Val COMT patients may find bupropion provides sufficient stimulation to reduce meth craving. Check CYP2B6 status before dosing.
Naltrexone	Evidence for reducing stimulant-associated euphoria; may reduce craving	OPRM1 gene variants (Asn40Asp, rs1799971) predict naltrexone response — A118G carriers show strongest response. This is the receptor blunting strategy — reducing the reward signal from the drug reduces its pull.
Modafinil / Armodafinil	Evidence for cognitive improvement and fatigue reduction in meth recovery; may reduce craving	CYP3A4 metabolized. Particularly valuable for Warrior COMT profiles experiencing the flatness of early recovery — provides wakefulness and mild dopaminergic support without the addiction liability of amphetamines. Discuss with prescriber.
Mirtazapine	Emerging evidence specifically for meth use disorder — reduces use in several RCTs	Sedating antihistamine/antidepressant that may reduce the negative reinforcement driving meth use. Particularly relevant for people who used meth to manage depression or anhedonia. CYP2D6 and CYP3A4 metabolized.
Topiramate	Reduces craving and use across multiple substance disorders	Glutamate and GABA modulator. Addresses the glutamate-dopamine imbalance that drives addiction. Can cause cognitive

	including stimulants	slowing in some patients — particularly important to monitor in meth recovery where cognitive function is already compromised.

Bring this list to your physician or addiction medicine specialist. Ask specifically about your genomic profile's implications for medication selection. The Practitioner Guidebook (Volume IX of the main Compendium) provides the clinical pharmacogenomics reference for practitioners.

A Final Word

THE CENTURION — You Are Not the Character

The system that drove you to methamphetamine — the hunger for intensity, the need for more than baseline life could provide, the willingness to sacrifice everything for the feeling of aliveness — that system is not broken. It was running on the wrong fuel.

The people this compendium is dedicated to — the ones who ran out of time before anyone told them their biology was not their fault — they had the same engine you have. The difference between their story and yours is not character. It is not willpower. It is not strength of spirit. It is information. And timing. And the accident of having one more chance to use it.

You have the information now. You have the map. You have the Recovery Kernel.

The Olympian of Nothing is ready to become an Olympian of something real.

The only question is what you will choose as the address.

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Refer to the Recovery Kernel Complete Centurion Compendium for all referenced protocols.
Crisis support: text or call 988 | Emergency: 911 | SAMHSA Helpline: 1-800-662-4357